

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| Applicant : Francis X. Ignatious | Art Unit : 1631 | RECEIVED CENTRAL FAX CENTER |
| Serial No. : 09/744,350 | Examiner : BORIN, Michael L. | |
| Filed : May 22, 2001 | | JUN 29 2007 |
| Title : ENCAPSULATION OF WATER SOLUBLE PEPTIDES | | |

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EV954533016US

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Pursuant to the Pre-Appeal Brief Conference Pilot Program, Applicant hereby requests that a panel of examiners formally review the legal and factual basis of the rejections in the application prior to the filing of an appeal brief.

Primary Examiner Michael Borin, Ph.D. (hereinafter, the "Examiner") mailed a final Office Action (hereinafter, the "instant Action") on 03/29/2007, finally rejecting all claims under examination (claim 17 and the dependent claims 19-22, 25, 28, 29) under 35 U.S.C. §112, first paragraph, for allegedly "introduc[ing] new matter as it introduces an unsupported specific negative limitation to exclude polyesters which are 'not a carboxy-terminated polyester'." (see pages 2-3 of the instant Action). In particular, the Examiner states, at page 3 of the instant Action, that "as 'carboxy-terminated polyesters' are not positively recited in the specification, they may not be explicitly excluded in the claims" and that the Examiner "has not found *ipsis verbis* support for this negative claim limitation in the specification."

However, as discussed in Applicant's paper filed on 12/14/2006, at pages 9-11:

The *ipsis verbis* support in the specification for the negative claim limitation is found at page 19, lines 25-27, as follows: "Water insoluble salts of peptides with carboxy functionalized PLGA were prepared as described in US Patent No. 5,672,659 the teachings of which are incorporated herein by reference." MPEP §2163.07(b) provides that "[t]he information incorporated [by reference to the document in the text of the specification] is as much a part of the application as filed as if the text was repeated in the application, and should be treated as part of the text of the application as filed." ...

The following is FIG. 2 as found in the '659 Patent:

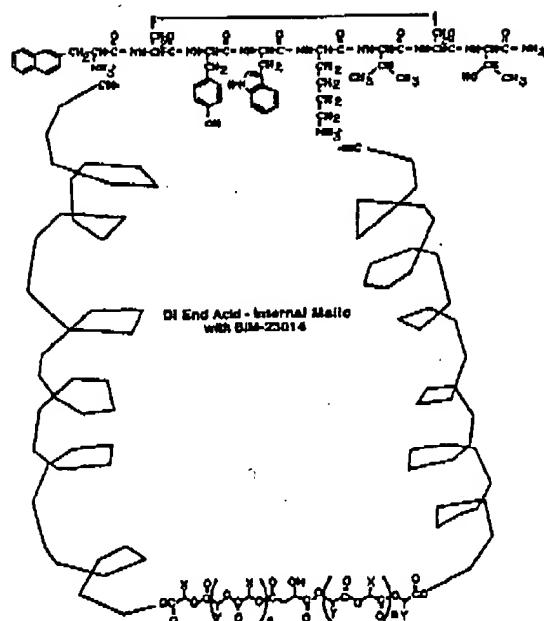
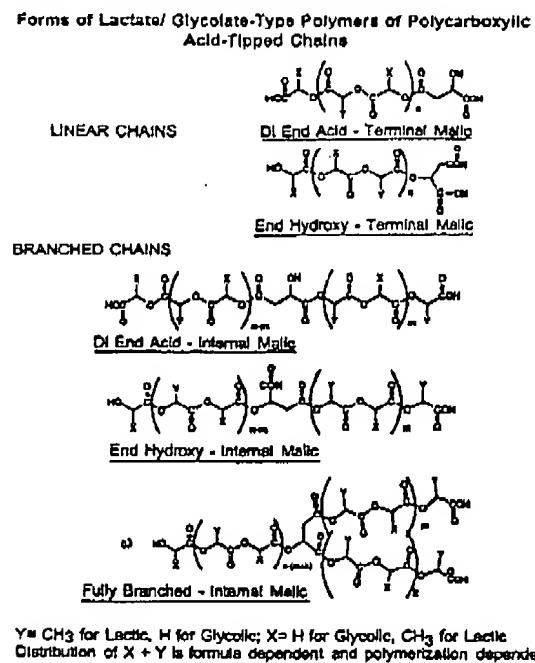


FIG. 2 of the '659 Patent is "an illustration of an ionic molecular conjugate depicting the chemical interactions between the lactide/glycolide (malic type) copolymer and Somatuline (BIM-23014)." See column 5, lines 6-9. This corresponds to page 20, lines 1-3, of the present application, wherein it is stated that "[i]n a typical experiment 4 g of p(dl-lactide-co-glycolide) having Mn= 5560 and Mw= 12200, acid and polymer composition 70/30 dl-lactide/glycolide, prepared using 2% malic acid was dissolved in acetone." FIG. 2 of the '659 Patent is accompanied by the text "Di End Acid-Internal Malic with BIM-23014," and it clearly shows the "di end" or "carboxy-terminated" aspect of the polyester.

The following is FIG. 1 as found in the '659 Patent:



All of the "Di End" "Terminal Malic" polyester chains depicted in FIG. 1 are "carboxy-terminated."

In view of the abundant description – both text description and "drawings" illustrations of same – of "di end terminal malic" polyester chains in the '659 Patent, which is expressly incorporated by reference into the present application, there is *ipsis verbis* support for the negative limitation to exclude polyesters which are "not a carboxy-terminated polyester."

In responding to the above argument, the Examiner, at page 4 of the instant Action, states:

[F]ollowing applicant's reasoning, by excluding exclude [sic] "polyesters which are not a carboxy-terminated polyester", the remainder of the genus is a [sic] carboxy-terminated polyester, i.e., exactly the subject matter being excluded by the proposed negative limitation.

The Examiner further states, at page 5 of the instant Action:

Further, with respect to showing in US 5,672,659, Fig. 2, addressed by applicant, depicts the *product* of interacting peptide salt with a polyester, whereas the subject of negative limitation is the polyester interacting with the salt of peptide, i.e., *before* the interaction. (emphasis added)

Applicant does not understand what the above quoted statements of the Examiner have to do with the central issue of whether the negative limitation of claim 17 – i.e., "provided that said polyester is not a carboxy-terminated polyester" – has basis in the original disclosure. For instance, what is the relevance of the Examiner's discussion concerning whether the "carboxy-terminated polyesters," as clearly shown in Figs. 1 and 2 of the '659 Patent, are depicted as part of the *product* of interacting peptide salt with a polyester, or *before* the interaction? In fact, a close reading of claim 17, as amended to include all of the limitations of original claim 18, suggests that the subject of the negative limitation relates to the *product* of interacting peptide salt with a polyester. Specifically, claim 17 recites "... dissolving a salt of a peptide *complexed with* a biodegradable polyester functionalized with an anionic moiety selected from the group consisting of phosphate, sulfate and carboxylate in an organic solvent to form a solution ... provided that said polyester is not a carboxy-terminated polyester." (emphasis added)

In the Interview Summary dated 04/23/2007, the Examiner wrote:

Applicant shared the Examiner's position that the term "terminated" addresses presence of a carboxy- group at a terminus [sic] of a polyester molecule, e.g., as in Fig. 1 of '659 patent. Examiner maintained then the position that excluding polyesters which are "not a carboxy-terminated polyester" represents a new matter as addressed in the rejection.

Again, Applicant is not clear as to the Examiner's basis for maintaining the rejection in relation to the central issue of whether the negative limitation of claim 17 has clear support in the original disclosure. Moreover, Applicant has provided his reasoning for the negative limitation of claim 17 as set forth in Applicant's previous submission of paper filed on 06/05/2006, at pages 9-10:

[I]n an effort to better distinguish the present invention over the unanticipated 102(e) art, i.e., the Hutchinson patent, Applicant has amended claim 17 to include all of the limitations of original claim 18. ... [T]he Hutchinson patent is directed to novel salts composed of a cation derived from a peptide containing at least one basic group and an anion derived from a *carboxy-terminated* polyester There is no discussion and/or suggestion found in the Hutchinson patent to use a "functionalized biodegradable polyester" particularly one containing a phosphate or sulfate anionic moiety, as recited in claim [17] of the instant application. In fact, of all of the "suitable" polyesters proposed for use by the Hutchinson patent ... , none contain either sulfur or phosphorous. With respect to those polyesters functionalized with only a carboxylate moiety, in an effort solely to eliminate any possible confusion with the Hutchinson patent, a *proviso* clause has been appended to claim 17 to eliminate use of a polyester functionalized with only a carboxylate anion at the C-terminal. (emphasis original)

At page 5 of the instant Action, the Examiner suggests that the prior art rejections of claims 17, 19-22, 25, 28, 29 would be overcome if the negative limitation disclaiming "carboxy-terminated polyesters" has clear support in the original disclosure. This shows that the Examiner understood that the purpose of the negative limitation is to remove any possible overlap with the cite prior art reference(s), and has accepted it as such. This makes it all the more puzzling that the Examiner professed his confusion during the interview with Applicant's representative with respect to the intended definition of "carboxy-terminated" and the Examiner's maintenance of the rejection in spite of his acknowledgement that the "carboxy-terminated" polyester is clearly shown in Figs. 1 and 2 of the '659 Patent.

Furthermore, Applicant does not understand the Examiner's repeated discussion in the instant Action of Applicant's unwitting use of triple negatives (i.e., excluding polyesters which are not a *carboxy-terminated* polyester) in Applicant's paper filed on 12/14/2006. That is, the Examiner reasons, at page 4 of the instant Action, that Applicant is using the negative limitation to exclude polyesters which are not a *carboxy-terminated* polyester, thereby removing "anything BUT carboxy-terminated polyesters". (emphasis original) Applicant respectfully submits that the Examiner's factual determination that the negative limitation purports to exclude "polyesters which are not a *carboxy-terminated* polyester" from the scope of claim 17, is a clear error in fact.

Still further, Applicant does not understand the Examiner's statement, at page 4 of the instant Action, "the negative limitation finds no anchor in the explicit claim language." Firstly, Applicant never relied on the explicit claim language to provide support for the negative limitation. Secondly, it is a clear error in law on the part of the Examiner to suggest that the negative limitation must find anchor in the explicit claim language.

The Examiner's focus throughout the instant Action has been on Applicant's representative's use of triple negatives, on whether the negative limitation finds anchor in the explicit claim language, on whether the '659 Patent shows the polyester having terminal carboxy group *before* or *after* said interaction, etc., rather than addressing the central issue of whether there is clear basis in the original disclosure to support the negative limitation to exclude "carboxy-terminated polyester." Furthermore, the meaning of "carboxy-terminated" polyester has been clear from the explicit claim language of claim 17 in its entirety and the reason for the negative limitation as set forth in Applicant's submission of paper filed on 06/05/2007.

In view of the remarks herein, Applicant respectfully requests the panel to review whether the original disclosure, which includes the '659 Patent under the doctrine of incorporation by reference, discloses "carboxy-terminated polyester," either *ipsis verbis* or under the doctrine of inherency as discussed at pages 11-12 of Applicant's submission of paper filed on 12/14/2006.

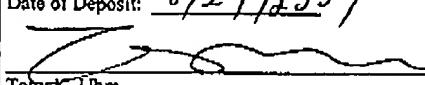
Respectfully submitted,

Date: 6/29/2007



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| I hereby certify under 37 CFR §1.10 that this correspondence is being deposited with the United States Postal Service as Express Mail No. <u>FY954533016US</u> with sufficient postage on the date indicated below and is addressed to the Assistant Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450. | |
| Date of Deposit: | <u>6/29/2007</u> |
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